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Procedia - Social and Behavioral Sciences 67 (2012) 203 – 207

Procedia
Social and Behavioral Sciences

The 3rd International Conference on e-Learning
ICEL 2011, 23-24 November 2011, Bandung, Indonesia

Online Course: Media Empowering in Education Process

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Abstract

The development of information technology is growing rapidly, thus change the community paradigm in finding and getting information. Increasing needs of information technology and communication occur in education sector, including at Padjadjaran University which since 2003 has pioneered the implementation of e-Learning as one method of online learning. In the period of 2010-2011 more than 149 lecturers had attended LMS Moodle training with 296 online courses. Online courses do not eliminate the meetings of lecturers and students in the class, because face-to-face in the classroom between lecturers and students are still needed for getting immediate feedback and human touch which is difficult to obtain by using media such as internet. Thus, the blended learning method is the most ideal way.

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Selection and peer-review under responsibility of i-Learn Centre, Universiti Teknologi MARA, Malaysia

Keywords: LMS Moodle; Blended Learning

1. Introduction

Utilization of technology through the internet has an increasingly important role in application learning of technology based on e-Learning in education area. Establish a learning model through the effective and efficient method is a strategy for educators in creating an academic climate, one learning method that can be adapted is to implement web-based learning. Which the learning process is not purely through the internet only but by combining the face-to-face meetings with electronic learning. Through collaboration methods of education through face-to-face and electronic, students are expected to foster the socialization process amongst students and educators as the adviser, also to prepare both parties in utilizing the development of technology and information.

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The development of information technology in recent years has grown rapidly, so that this development has changed the paradigm of community in finding and getting information, which is no longer limited to information from newspapers, audio visual and electronics, but also other sources of information which is Internet. The need of information and communication technology that has been also applied in education area, particularly in Universitas Padjadjaran. To implement e-Learning process comprehensively and continuously at the Universitas Padjadjaran, it is necessary to see the extent of lecturers' needs in the use of e-Learning as one learning method.

Universitas Padjadjaran has a mission: To implement management of education, research, and community service, according to the university's vision, and to produce graduates who are faithful, intelligent, independent, and civilized. So, the university responds the technological development as collateral matter in running its vision and mission.

E-Learning is an educational system that uses electronic applications to support teaching and learning process with the Internet media, computer networks.

At Universitas Padjadjaran, online learning activities have been held since 2003. As an illustration, lecturers using e-learning facilities in the period 2004 - 2008 there were 479 lecturers in 332 subjects who had received training using the LMS WebCT, the current data needs to be verified. (E-learning Universitas Padjadjaran, 2008).

Considering the condition of the LMS WebCT, e-learning team immediately decided to perform the migration by modifying LMS Moodle which is open source to be used in an online course activity. Modifications have been implemented since July 2010 and have been introduced and used.

The Role of Teaching Media in Learning Process

Quoting from the statement of Hisbullah (2006) in his research result that the teaching strategy according to Muhibbin Syah (2002), it is defined as the number of steps that are modified in such a way to achieve specific teaching purposes. This teaching strategy includes several stages, such as:

- The strategy of objectives formulation of teaching-learning process, which deals with strategies that will be used by lecturers in determining the pattern of teaching to reach the teaching-learning process target.
- Strategic planning of teaching-learning process, related to the implementation to achieve determined targets. In this phase including the planning of teaching media to be used.
- Strategies for the teaching-learning process, related to the teaching systems approach which really fits with the subject of teaching materials.

2. Learning Management System Moodle

Moodle is a learning management system (LMS) that is open source usually called Virtual Learning Environment (VLE) used for universities, college community, business, even for instructors and individual that use it to add their web technology program. Indeed, LMS Moodle is available as open source (free) which can be downloaded via <http://www.moodle.org> under the GNU Public license, so anyone can download and upload it. There are several advantages of Moodle, besides than open source, the LMS is also very possible to perform modifications to suit the needs and interest of the users, and easy to learn and use.

Universitas Padjadjaran through e-learning management team since mid-2010 has been using LMS Moodle to conduct training to the lecturers in order to be able on applying the LMS Moodle-based onlinelecture. The use of open source LMS with address <http://elearning.unpad.ac.id/kuliahonline/> is implemented after the management of e-learning seeks modifications in some cases, such the front display that can be seen from the image below:



Fig. 1. Front display of LMS Moodle-based online course of Universitas Padjadjaran Lecturers

Display in Figure 1 is modified version from previous Moodle that can be downloaded for free, yet frontdisplay directly from <http://www.moodle.org>. Significant growth occurred in 2011 which was recorder in August 2011, there were 296 onlinecourses from 149 lecturers that the spreading can be seen in following table.

Table 1: Number of Lecturers and Online Courses

No	Faculties	Number of Courses	Number of Lecturers
1	Law	35	25
2	Economy	13	4
3	Mathematics and Natural Sciences	48	25
4	Agriculture	34	16
5	Dentistry	10	5
6	Social and Political Sciences	12	6
7	Literature	20	5
8	Psychology	12	4
9	Communication Science	8	6
10	Nursing	25	10
11	Husbandary	34	19
12	Fisheries and Marine Science	7	4
13	Pharmacy	22	14
14	Geology Engineering	8	5
	Total	295	148

Source: e-Learning Management Team of Universitas Padjadjaran, September 2011

Besides the existing data in that table, there is one subject which is not entered in any faculty management that is Religion subject (Protestant Christian) that has gone live with one lecturer.

Some obstacles encountered, such as computer room facilities for students who will perform online courses have been not adequately available, although the university has attempted to provide hotspot areas at various points on campus. Another obstacle facing the online lectures are unprepared integrated academic administration, such as the online-lecturers can not be monitored by faculty because there are no devices for it. So that, manually the lecturers have to report his absence in class that could be considered not perform teaching responsibility. Though the lecturers perform the course without a face-to-face in classroom and replace it with an online course.

Based on the number of recorded lecturers who conduct online courses, for the evaluation purposes of online courses using LMS Moodle, in May 2011 e-learning management team made the categorization of lecturers' activities.

The conception of this categorization is based on several aspects, such as the lecturer who has followed a two-day training organized by e-learning team management of Universitas Padjadjaran, also uploading course content for one semester, including material of quizzes, assignments, mid-test, and final-test. From the categorization criteria expelled those lecturers who conduct online classes in Unpad distributed on three categories: High (38.46%), Moderate (21.37%), and Low activity (40.17%).

Through interviews, it was obtained data that students become more motivated to learn independently in fact they get extra motivation (students love to have to open an online course materials) with this new learning process. To reinforce the opinion of the lecturer (BI), crosscheck interviews were conducted to students who enrolled online course from the lecturer concerned.

The crosscheck was done by spreading an online questionnaire to students with questions about what benefits they get from online course, how they feel about the Internet-based course and what matters can be provided by lecturers through online course. Result of the questionnaires can be simply concluded that besides the lecturers can provide main course material also there are other things students experience to get new knowledge besides the main subject. The new material is about Internet usage particularly the use of LMS Moodle. Moreover, through online course the lecturers actively provide enrichment materials out of the main materials. Other important things are the improvement of students' enthusiasm and motivation when lecturers are actively open online discussion through provided forum. In addition, lecturers can easily show the sources of literature and material (reference) such as journal and e-book which become another interesting matter of online course. Furthermore, the attractive matter for students in online course is when the lecturers give online quizzes and assignments also discussion of the assignment can be done directly (feedback) is an extraordinary thing.

3. Blended Learning

Implementation of an online course at Universitas Padjadjaran tends to be implemented by blended learning method. The blend applied is to determine how many course sessions are conducted online. From the data that was collected, a lecturer from the Faculty of Mathematics and Natural Sciences, had four sessions of 16 lecture sessions in a semester done online. The rest of the lectures are done in a conventional way which is face-to-face. According to BI, that lecturer, the meeting with students in the class is still very necessary because lecturers require direct feedback with the students as well as the human touch when they meet in person which will not be obtained when the interaction is via online.

Regarding the blended learning method itself proved to have diversity, which is a combination of 2:1, i.e. from 3 SKS each online course then valued at 2 credits used online by students to obtain course materials and 1 SKS next is face-to-face with the lecturers to discuss material that had been obtained earlier through online. There is also blended with 3 sessions of 14 to 16 sessions in one semester is done

online. In Unpad itself from the lecturers who have done online courses, there are two types who have done either one of both models.

Theoretically, blended learning is to combine learning activities between the conventional (face-to-face) and use computers based on the instructions of the lecturers which the materials are in digital form used to assist the conventional teaching-learning process. For example, the teaching-learning process activities is conventionally done 7 times in the class meetings maybe changed to 5-6 times face-to-face and one time face-to-face to be converted to online meeting and this can be tailored to the needs of the existing teaching learning process.

4. Conclusion

The use of technology through the Internet has an increasingly important role in application learning of technology based e-Learning in education area. Online course does not eliminate the meetings of lecturers and students in the class, because there are also face-to-face meetings in the classroom. Conventional lectures, face-to-face meetings in the classroom between lecturers and students are still needed for getting immediate feedback and human touch which is difficult to obtain by using media such as Internet. So, that the blended learning method is the most ideal way.

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